

Rationing Medical Care to the Elderly Revisited: Futility as a Just Criterion

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"The prolongation of life is ultimately an impossible or rather an unobtainable goal for medicine. For we are all born with those twin and inescapable diseases - aging and mortality." Kass¹

On August 3, 1993, in preparation for house debate of his economic package, President Bill Clinton observed that his plan would, "cut health care costs without hurting the elderly." His statement, at least for now, ended ten years of debate concerning the rationing of medical care to the elderly. The debate began in 1983 ostensibly with economist and later Federal Reserve Board chairman, Alan Greenspan, responding to the statistic that people over 65 comprised 12% of the population but consumed 1/3 of our nation's health resources. He addressed this disparity with the rhetorical question, "Whether it is worth it?"² This is the crux of the elderly-rationing question - is the allotment of extensive Medicare monies to the elderly associated with a verifiable reduction of morbidity/mortality in the later stages of life? Is a continued disparity worth it? This is the subject and question that will engage our discussion. The debate concerning the elderly and rationing should begin with an outline of the project at hand. First, I will review the definition and description of the "rationing" enterprise. This description will include discussion of de facto and de jure medical rationing, with the Oregon state Medicaid program serving as the latter example. Second, I will develop a rationale in an attempt to answer why rationing appears attractive, especially if it is specifically applied to the elderly. Third, I will review three different attempts to justify rationing to the elderly - what is now the minority view - which include Daniel Callahan's Setting Limits³, a paper I co-authored, "Teach Us To Number Our Days, (Ps. 90:12): Age and Rationing of Medical Care: Use of

Biblical Valuation of Personhood,"⁴ and a counterpoint to the coauthored paper which was written by Dr. Ed Payne.⁵ Finally, a review of these three sources will culminate in a synthesis extracted from the pro-rationing arguments and consideration of their impact on the elderly.

Rationing: Definitions, Descriptions, and Experiments

No free society in the contemporary technologic era of medicine can provide everyone with every medical intervention and survive. This is the basis for any discussion which considers the rationing of medical care. This by necessity leads to some initial definitions. Rationing may be defined as the de facto or de jure allotment or limitation of medical care necessitated by a shortage of money available. Inherent in such an allotment or limitation of medical care expenditures is that it will be based on a just, nondiscriminatory standard. The debate, pro and con, which confronts rationing encounters a biased citizenry in the United States of America. Any such dialogue implies the pejoratives of scape-goating, shortage, unequal access and opportunity - all very un-American concepts. Though most Americans withhold approbation for medical rationing, the realism interjected recently by its inception in the Oregon Medicaid program makes further discussion a contemporary imperative.

The State of Oregon confronted Medicaid shortages with a rationing plan that engages a "just standard" through a program based on the "what" and not the "who" that gets covered.⁶ To accomplish the "what" led at first to a cumbersome list of 709 disease entities, reduced later to a still unwieldy 587. The "list" is a hierarchy which includes for example valuation of

"prenatal care" over the less favored and less successful expensive technologies (i.e., heart transplant). I would like to digress slightly in the context of the Oregon rationing experiment and study certain essential ingredients of this particular form of rationing, and, in so doing, increase rationing vocabulary through application of the concepts of futility and justice. The definition and expansion of these concepts will be crucial to our later synthesis of medical rationing. Since the Oregon rationing project uses both as criteria for "what" is covered, they will be discussed at this juncture.

Hepato-renal syndrome is defined as end-stage liver dysfunction with functional but irreversible kidney failure.⁷ No medical or technologic intervention short of immediate liver transplantation is known to reverse an inexorable, fatal course. Usually, this course is so acute and the patient so critical that transplant is not feasible. Hepato-renal syndrome is one of the "whats" not covered in the Oregon rationing plan.⁸ The rationale for non-coverage is as follows: further treatment does not benefit the hepato-renal patient who is, for all intents and purposes, terminal. Hepato-renal syndrome will serve as a paradigm for the concept of futility. This concept may be defined as any medical treatment which secures mere biologic survival but not meaningful recovery or reversibility. Futility may also be defined as any medical treatment that prolongs the dying process but does not result in meaningful survival. For example, from the dialysis patient's perspective, when dialysis is applied to most forms of kidney failure it secures a reasonable quality of life. However, dialysis does not lead to survival in hepato-renal syndrome and thus should be considered a futile intervention. Futility should be utilized more frequently during ethical decision making in medicine - especially as it pertains to rationing. This digression provides a preliminary overview of the concept.

The second decision as to "what" is covered in Oregon attempts to engage the concept of justice. For example, the Oregon program does not reimburse liver transplants in people who suffer from alcoholic cirrhosis.⁹ However, cirrhosis from other or "non-behavioral" causes, i.e., primary biliary cirrhosis, is reimbursable. The designers of the Oregon protocol

perceived that the transplantation of people who did not "cause" their own liver disease was just. A more detailed discussion of justice in the context of rationing will be delayed until our final synthesis, but implementation in a contemporary rationing plan such as Oregon's is a valid starting point.

Rationale for Medical Rationing: Two Questions

Rationing on state and local levels may evolve into a more comprehensive federal program. An approach to two questions re: rationale for such and targeting of plans toward the elderly should be addressed now.

A relevant previous observation, "no society, especially in the age of expensive technology, can provide everyone with every medical intervention and survive," will be substantiated. Statistics in 1992 documented that 738 billion dollars per year were spent on health care in the United States - a full 13% of the gross national product.¹⁰ Future projection of these figures, without change in present growth rates, would create policy trends expending 26% of the gross national product by the year 2030. Such medical costs stand in stark contrast to medical spending in the United Kingdom and Canada, in that the United States is 74% and 27% higher than either of these two countries, respectively. With contemporary medicine modeled as autonomy and consumerism, costs will continue to escalate as the public concomitantly demands immediate access to medical service, state of the art technology, and limited price.

One logical method to halt this escalation in medical expenditures would begin with identification of a group which receives disproportionate monies for health care. This might also be a group increasing both in size and health care costs, and most importantly with a group that does not appear to get maximum value for the dollar spent. For many, such a group is the American elderly.

By 2005, thirty-five million Americans will be older than 65 years of age and 50% of those older than 75 years of age.¹¹ Trends suggest that 100,000 people will

celebrate their 100th birthday the same year. Within the group of elderly, hospital costs increase for the same diagnosis as the elderly age further. For example, costs are 50% higher for the same diagnosis in someone age 85 compared to ages 66- 71.¹² Translated into dollars and cents, in 1987, 28% of the total Medicare allotment (22.7) billion dollars) was reimbursed on 6% of Medicare recipients, all of whom died that same year.¹³ Statistics such as these serve to highlight not only the vast sums of money expended, but they may also raise a question of value for such dollars spent.

Review of these figures should substantiate both the rationale of rationing as well as the use of age as a potential criterion. In this context, I would like to review the pro-rationing arguments of Callahan, Rutecki-Geib, and Payne prior to an attempted synthesis and prescription for the issues discussed.

Daniel Calihan and His "Setting Limits"¹³

We begin with a Calihan quote which may serve as a substantive ethical statement in his attempt to place boundaries on any rationing proposals. "There is an important difference between taking age into account in order to provide the most appropriate treatment and the use of age as a standard for the discriminatory denial or modification of treatment."¹⁴ The essence of this quote is its stress on appropriate criteria for rationing - which do not include age discrimination - as the sine qua non for justice in medical allotment decisions. Though Mr. Callahan reasons and writes from a secular-pluralistic world view perspective, there is much in his book with which I agree as a Christian. He articulates a necessary differentiation between care and cure, a key in any discussion of the elderly and rationing.¹⁵ Further development in his concept of care-cure espouses a philosophy which realizes that a significant part of the elderly identity problem is ontologic and expressed in the question, what does it really mean to grow old? Though this question cannot be answered by a pluralistic society, Callahan does decry medical futility in its endeavor for a fountain of youth. He further attempts to juxtapose aging with appropriate meaning, and finally concludes that the heart of the problem is a society which does not have a telos for aging.¹⁶ All of these

observations accurately portray contemporary medical intervention adrift without consensus.

Following this background material, he provides a test for potential rationing as follows, "individual human life is respected for its own sake, not for social and economic benefits and the individuals may not be deprived of life to serve the welfare, alleged or real, of others."¹⁷ He then attempts to posit some pragmatic tenets of his rationing enterprise. The one he offers is an age-based standard for the termination of life extending treatment perceived as a legitimate beginning.¹⁸

I would argue his age-based termination of life support as follows: If we were to choose dialysis as an example of such life-extending therapy and arrive at an age-based standard, I would have great difficulty with the justice of that choice. The incorrect assumption that life support is homogenous when it is based on age may lead to unjust practices. For example, Kjellstrand has studied two groups within the confines of the elderly who are dialyzed with different outcomes.¹⁹ In the elderly, chronic hemodialysis leads to a reasonable quality of life and not a particularly disturbing mortality. However, acute dialysis with specific diseases (ruptured abdominal aortic aneurysm with renal failure) may be associated with 100% immediate mortality. This will be discussed in more detail later. For now, Callahan's use of an age-based standard is faulty in this regard and one must arrive at more just criteria in the application of medically rationed dollars.

The other shortcoming in his proposal emanates, not from himself or his argument, but from the very nature of the society which he inhabits. He states, "a community that did not care for its elderly would not be a moral community."²⁰ Also, "because of pluralism we lack any common coherent vision of the wellsprings of moral obligation towards the elderly in general."²¹ This assertion is a disturbing parallel to William May's quotation about the dying, "death is not only a crisis of the flesh, it is ... a crisis of community. Death will also reveal starkly and unmistakably something about the communities in which a dying person lives."²² The aspect of Callahan's "setting limits" scenario that is most unnerving is the one that would set limits on the medical

care of the elderly in a community that lacks a vision of moral obligation to the elderly. This may suggest euthanasia as *de rigeur* and a substitute for moral obligations that remain yet undefined.

Rutecki-Geib: A Biblical Approach to Rationing

In this paper, the ultimate valuation or sanctity of human life was substantiated through God's four investments in mankind:²³ 1. Creation (Gen. 1:26-27); 2. Bankruptcy by sin necessitating redemption (Pet. 1:18-19); 3. Return to solvency: sanctification (2 Cor. 3:18; 4:4); 4. Ultimate profits: glorification (Rom. 8:28-30; 1 Cor. 15:45-49). In this context, life -elderly or otherwise - has an infinite value (1 Pet. 1:18-19). However, the authors note that other passages in the Bible seem to place relative degrees of value on persons and do take age into account during this valuation (esp. Lev. 27:1-8; Ps. 90:1-12). The authors attempt to bring scriptural truth to bear on this discrepancy of spiritual vis a vis existential valuation - through analogy. Scriptures cited for the application of analogy include: Lev. 25; Ps. 90 - both noting that biologic life depreciates in a fallen world, that biologic life ultimately belongs to God, not to individuals themselves, and that life is limited in length; Lev. 27:1-8 - age and functional worth seem to vary; Ecc. 12:1-8 - youth juxtaposed with old age reveals declining bodily function as expected with aging.

The authors' application of the scriptural analogies leads to the following conclusion: paradigms for rationing medical care to the elderly seem essential since the use of money for the medical care of the elderly potentially compromises the care of those in younger and more functional age groups.²⁴ In retrospect, I think that the Bible intended these verses to furnish a perspective on the inevitability of aging and death in a fallen world. I no longer believe that they, by analogy or otherwise, are an indication for the rationing of medical care to the elderly. I would like to proceed to substantiate this later observation through the use of selected contemporary and corroborating statistics.

The average life span in this century has increased from 47 to 73 years. It is critical in this context, however, to note that maximum life span has not increased.²⁵ The

change in the 47 to 73 year span represents rather progress in the elimination of early death, particularly in the neonate.

Minor, recent increases in longevity from age 75 to the early ninth decade are consistent with an asymptotic curve; further indefinite increases in survival and age are thus unrealistic. In aggregate, the scriptures used by Rutecki and Geib illustrate just such an asymptote of the inevitability of aging and death, not an indication in itself for rationing. The only way a leap may be made from the finite life expectancy remaining in the elderly to rationing is through further development of the concept of futility. Otherwise, age-based rationing would be discriminatory and inconsistent with justice. This last point will lead to Dr. Payne's counterpoint to the above biblical study.

Dr. Payne's Counterpoint to "Teach Us to Number Our Days" (Ps. 90:12)

Dr. Payne's contention is straightforward and may be summarized: though age-based rationing itself is not biblical, rationing may be considered when it is based on the criteria of efficacy-futility.²⁶ This is a critical distinction and requires further discussion.

The concept of medical futility has been defined earlier. The value of this concept in ethical medical decision making is not only of recent vintage. A short but trenchant review of the application of futility in a Judeo-Christian world view perspective is essential to the further development of Dr. Payne's observations.

The Hippocratic tradition is comprised of both Hippocratic oath and other writings called the Hippocratic corpus. Ludwig Edelstein noted in his translation and commentary on the Hippocratic corpus that "prudent Greek physicians had an obligation not to treat incurable diseases" (futility).²⁷ The Hippocratic tradition is consistent with the Christian practice of medicine and as a starting point for our discussion should not be minimized, especially as it is applied to futility.²⁸

In Jewish tradition, a stringently and explicitly pro-life

tradition, the physician was told that he had no duty to treat *gesisah* (someone terminal who would die in less than 72 hours). Any attempt to cure such a person would be construed as an artificial impediment to death.²⁹

no extraordinary care, Protestant: do not prolong the dying process) are consistent with a philosophy to forego attempts at cure in futile situations.³⁰

Finally, the President's Commission (1983) states that a physician is legally and ethically justified not to use futile care.³¹

Though Dr. Payne agrees that limitations in medical spending are a necessity, his conclusions drawn from this fact are different. He believes that care should be emphasized over cure; he suggests increased involvement of the church and family in providing scriptural approaches to terminal care. Finally, he would agree with conclusions of Rutecki and Geib on rationing if they were based on considerations of efficacy and futility. This conclusion offers us an insight into a scriptural and nondiscriminatory approach to rationing.

Synthesis: Rationing Medical Care

My revisit to rationing now reaches a conclusion similar to Payne's, i.e., rationing is necessary and just but for reasons different than I first believed. In order for a rationing program directed towards the elderly to be just, it must have a sole foundation, i.e., futility. Since the elderly have more futile care applied to them than almost any other group,³² they will be affected by medical rationing more than others. However, limits to medical care will not be based on the discriminator of age but rather on a technology which does not provide meaningful survival. Major obstacles to implementing a program such as this (rationing by futility) are two: pluralism in the contemporary consumer model of medicine and the ever-present danger of euthanasia.

Pluralism impacts a definition of futility more than any other contemporary impediment.³³ Since Callahan is correct in that there is no agreed upon *telos* for the aging process, the individual autonomy which leads to

this conclusion also results in the impossibility of defining futility. What kind of care would be considered futile if 100 different people have 100 different conclusions as to what is acceptable life expectancy, quality of life, and access to an ever expanding array of unproven technology? Despite this lack of meaningful consensus, I would like to attempt an initial definition of futility in the elderly by looking at the application of three different medical interventions. This will include: the use of cardiopulmonary resuscitation in the elderly, dialysis intervention both acute and chronic, and finally the application of ICU outcome measures (i.e., APACHE criteria).

Cardiopulmonary Resuscitation in the Elderly³⁴

A recent controversial study identified cardiopulmonary resuscitation in the elderly as a futile undertaking. In fact, CPR was unsuccessful in all 68 patients in this study who were greater than age 70. These elderly patients underwent a total of 77 unsuccessful resuscitative efforts. Twenty-two of the 68 decedents who survived for 24 hours after the first attempt at CPR experienced burdens without meaningful survival. Further studies such as these, particularly those that identify diseases which are associated with futile CPR³⁵ might identify the application of expensive interventions not associated with efficacy. This also brings us to the contemporary care in lieu of cure debate in medicine. In this study, did the staff attempting CPR discuss it as a futile endeavor prior to application? Did the staff allay significant fears and promise patients who did not want CPR that they would receive significant "quality of mercy" after a refusal? Did Christian staff pray with patients prior to and after a decision regarding CPR? These unanswered questions help us understand not only why futility has been so difficult to specifically define, but also that care is provided after cure is foregone demands substantial commitment.

The impact of just such an approach to CPR futility and DNR (do not resuscitate) orders may be empirically studied. Dr. Kanoti and associates at The Cleveland Clinic³⁶ implemented a well-defined" DNR policy January 1, 1988. The impact of this "ethically and legally responsible policy change" decreased length of

stay a median of 21 days. In 1989, this policy led to a total reduction in length of stay for Medicare patients of 1,911 days. The authors concluded that "appropriate use of a DNR policy not only provides quality care but also conserves medical resources."³⁷ In essence, the writing of DNR orders shifts terminal patients from cure to care treatment, decreases end of life futile and expensive interventions and is a just attempt at rationing.

Dialysis in the Elderly--Chronic and Acute

We have alluded previously to Daniel Callahan's limitation of elderly health care spending through the use of age-based criteria in the application of life support. I would like to expand that concept further with dialysis serving as one example of life support.

One construct for futility in the elderly has been postulated in the setting of acute renal failure complicating the course of a ruptured abdominal aortic aneurysm.³⁸ Age over 70 years in this specific setting was associated with 100% mortality. Further, no patient who developed positive blood cultures or had coma during their course survived. Finally, patients in this study who were not completely alert after three weeks of treatment all died. When Dr. Kjellstrand used these criteria in his patients, approximately 300 unnecessary treatment days were avoided without a change in mortal outcome. This provides another model in an attempt to define futility for the elderly.

However, Dr. Kjellstrand observed in other studies³⁹ that chronic dialysis in the elderly does not have such a dismal outcome. As mentioned previously life support application per se cannot be used as a criterion for rationing; rather the outcome or efficacy of that life support when used is critical.

The Use of the Acute Physiology and Chronic Health Evaluation (APACHE) in the Determination of Futility in the Subspecialty Practice of Nephrology

The APACHE II classification is based on 12 physiologic variables which are weighted according to deviation from normal ranges. These variants help define ICU accompaniments which predict a mortal

outcome. A final score is calculated for each patient and then combined with a weighted score which takes into account the patient's age and other chronic diseases. The method has been developed in extensive multicenter studies which initially involved 13 hospitals and more than 5,800 patients.⁴⁰ The accuracy of the APACT-LE system in predicting death is remarkable. However, it is better at predicting those who will die than those who will live (low sensitivity and low negative predictive value).⁴¹ For our purposes, however, the definition of futility requires greater accuracy in predicting death than in predicting life.

In one study, APACHE II criteria were used to evaluate the outcome of patients who required hemodialysis in an intensive care unit.⁴² A "risk of death" was calculated for each patient in the study (n=100). The APACHE system correctly predicted the demise of patients who eventually died with 100% specificity regardless of what interventions were carried out.

Even though we may each have an aversion to predicting patient survival through use of a computer data base, one cannot ignore the accuracy of the APACHE index in the context of the ICU nor the APACHE specificity in predicting mortality in high risk groups. These include the patients in whom cure oriented interventions are futile and increasingly expensive. Pluralism and autonomy may often lead to the application of just such expensive technology in these patients anyway, but this is exactly the reason why futility becomes the only just way to implement rationing. The APACHE II criteria may be applied to the elderly in the ICU and obviate the need for expensive life-prolonging therapy that provides no benefit by such an empirically documented system.

It is my intention that these three examples initiate a dialogue about the necessity for an accepted definition of futility. I have tried to be more specific, pragmatic, and empirically grounded than Callahan. At a minimum, I believe that a definition of futility is possible if American society can reach a just consensus.

Concluding Comments

A definition of futility in terminal patients will lead to one of two disparate attitudes in the community in which such patients die. These attitudes will either resemble one of two possible responses already practiced in the European community. Those dying in Great Britain access a hospice system which cares for them and does not in any way accelerate the dying process.⁴³ However, the dying in Holland access a system of voluntary euthanasia which offers acceleration of dying rather than care. Even if rationing is applied justly based on futility, I still fear that the community response to the terminal in America will tend towards voluntary euthanasia in lieu of care. This tendency is a concern Callahan shares as he describes the lack of consensus in America with regard to the aging and dying only through an increase in hospice presence. The debate must address when it is appropriate to change from cure to care. This is the only viable alternative to euthanasia. Christians must illuminate a theology of medicine which realizes ultimate cure comes only through Jesus Christ and is only realized at the resurrection of the body. Until then, medicine cannot indefinitely prolong life. Christians should understand that a belief in futility is consistent with Biblical constructs. Lastly, Christians must do all they can to combat the practice of medicine as technique modeled on autonomy and consumerism. These models lead to a misapplication of medical technologies and makes medicine an idol and a religion in and of itself.

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